

APPENDIX D
FLOODPLAIN STATEMENT OF FINDINGS

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TUSKEGEE AIRMEN NATIONAL HISTORIC SITE DEVELOPMENT CONCEPT PLAN AND ENVIRONMENTAL ASSESSMENT

Tuskegee, Alabama

Recommended:

Superintendent

Date

Certification of Technical Adequacy and Servicewide Consistency:

Water Resources Division

Date

Approved:

Regional Director

Date

FLOODPLAINS STATEMENT OF FINDINGS

TUSKEGEE AIRMEN NATIONAL HISTORIC SITE DEVELOPMENT CONCEPT PLAN AND ENVIRONMENTAL ASSESSMENT

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1. INTRODUCTION

1.1 National Park Service Requirements

Executive Order 11988, “Floodplain Management” (May 28, 1980), was issued “to avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.” The order requires Federal agencies to develop agency specific guidance, provide leadership and take action to:

- Reduce the risk of flood loss;
- Minimize the impact of floods on human safety, health and welfare; and
- Restore and preserve the natural and beneficial values served by floodplains.

This Statement of findings (SOF) has been prepared to comply with Executive Order 11988. The National Park Service (NPS) Director’s Order (DO) 77-2 (Floodplain Management) implements Executive Order 11988. The procedural manual of DO 77-2 establishes NPS procedures for implementing floodplain protection and management actions in units of the National Park System as required by Executive Order 11988, “Floodplain Management,” and Director’s Order #77-2, “Floodplain Management.”

The purposes of this Statement of Findings are as follows:

1. To document that no practicable alternative to use of the floodplain at TUA I for project development and achieve the NPS mission exists at this time.
2. To assess the potential risk to human life and property that is associated with development concept plans.

1.2 Description of the Proposed Action

The NPS recently prepared an environmental assessment for site development concept plans at Tuskegee Airmen National Historic Site (TUA I) in Macon County, AL. The purpose of the proposed federal action described in this Development Concept Plan/Environmental Assessment (DCP/EA) is to rehabilitate the cultural landscape of the TUA I to its period of significance (1941 to 1945) with focus on the Historic Core Area (HCA) of the site. A General Management Plan is being prepared simultaneously with the DCP/EA.

The proposed action includes the rehabilitation of the HCA, which would provide visitors with an opportunity to experience the site as it was when the Tuskegee Airmen were training for World War II. Improvements to the HCA would include the rehabilitation, restoration, or reconstruction of 15 buildings or structures in the HCA. Improvements in the proposed Visitor Services Area would include relocating the trailer that is currently used as the visitor center for use as a contact station. The existing parking facilities would be expanded. An Overlook Area would be provided to view the HCA from the hilltop near the main parking area, with a memorial to the Tuskegee Airmen close to the Overlook Area, as well as wayside graphic panels and exhibits dispersed throughout the Visitor Services Area. A picnic area and pedestrian circulation paths connecting the HCA and the Visitor Services Area would be constructed.

Other site improvements to the HCA based on historic documentation would include landscaping, new sidewalks and trails, resurfaced roads and plane tie-down areas, pond reconstruction, tennis court reconstruction, benches, lighting, windsocks, flags, and other historic elements. Improvements to the drainage, mechanical, and electrical systems, as well as installing a fire suppression system in the HCA are all part of the Preferred Alternative design. To the landscape to that period of significance, overgrown vegetation would be cleared and replanted with grass and appropriate landscaping. The plane tie-down area is currently failing impervious surface and this asphalt will be replaced as part of the DCP/EA. Short-term, minor impacts to floodplains would be related to construction of the historic pond and plane tie down area, and vegetation removal for historic landscape rehabilitation. Long-term impacts of the vegetation removal would be negligible as the area would be re-vegetated according to the landscape plan and the area would continue to function as a floodplain.

While DO 77-2 does not apply to historic or archaeological structures, sites, or artifacts whose location is integral to their significance or to certain actions as specifically identified in Procedural Manual 77-2, *Floodplain Management*, this SOF has been prepared since the preferred action was not included as an *exempted action* in Section V of DO 77-2.

1.3 Description of the Site

TUAI is located in Macon County, Alabama, approximately 2 miles north of the city of Tuskegee and the Tuskegee Institute National Historic Site. Interstate 85, which passes within approximately 1 mile to the north of the site, provides major vehicular access between Montgomery, Alabama, to the west and Atlanta, Georgia, to the northeast (Figure 1). The site is bound by the Uphapee Creek to the east, Highway 81 to the west, Highway 199 to the south, and Moton Field Municipal Airport to the north. Figure 2 depicts the TUAI and Moton Field boundaries.

1.4 Floodplains in the Area

Tuskegee is located in an intermediary zone between the Piedmont and Coastal Plain, referred to as the Fall Line Sandhills (NRCS 2003). The depth to bedrock at TUAI is

FIGURE 1: General Location Map of TUAJ

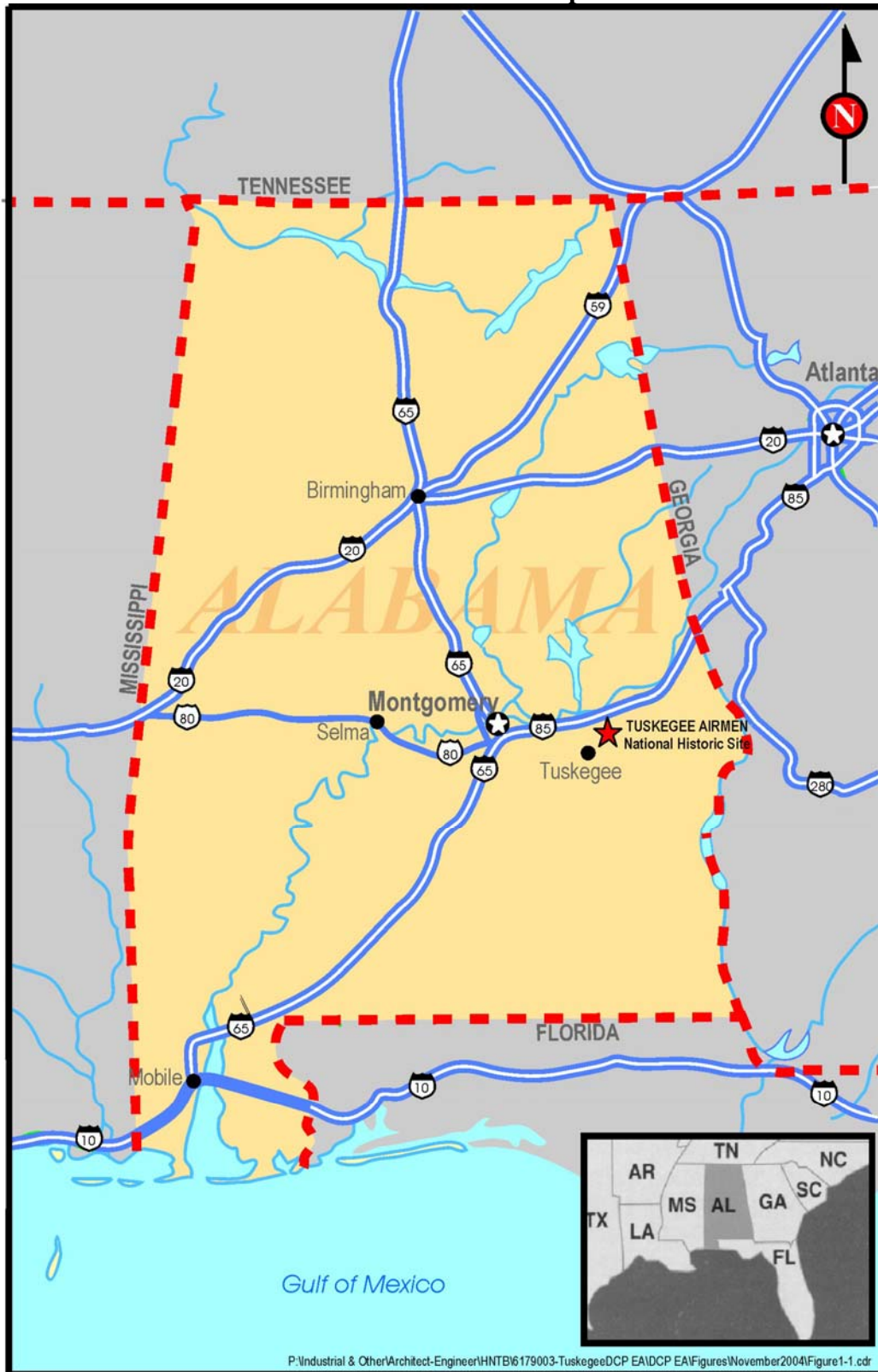
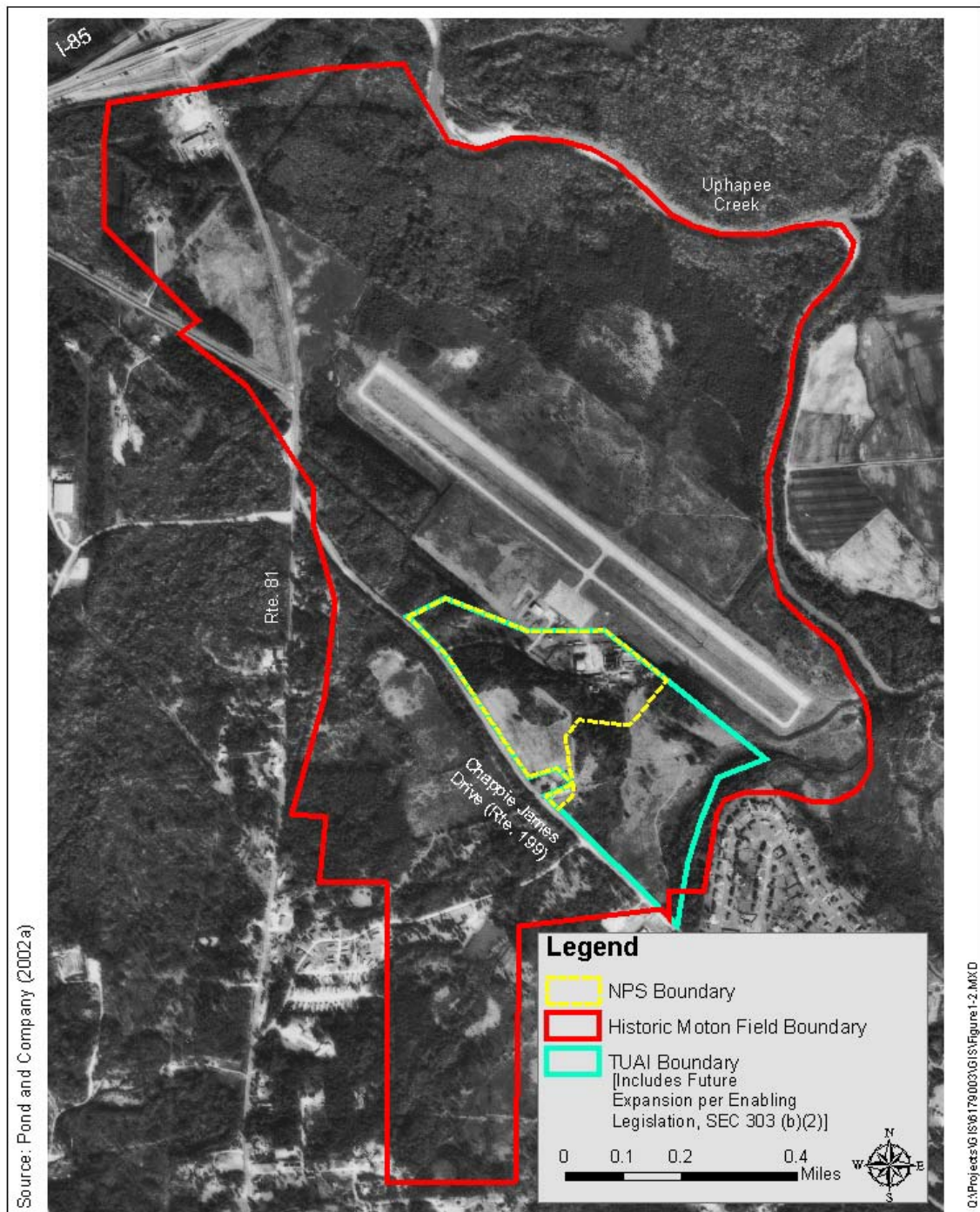


FIGURE 2: TUAJ and Moton Field Boundaries



greater than 60 inches. The Natural Resources Conservation Service of Macon County has mapped the soils for the County, but the maps have not yet been published (personal communication with Macon County Natural Resources Conservation Service 2004).

The soil series in the floodplain areas include Eunola fine sandy loam (EuA) and Bethera clay loam (BeA). Although the EuA series is rarely flooded, due to the physical properties and high water table, it is considered undesirable for most construction or road equipment (NRCS 2003). The EuA series is very deep, moderately well-drained soil on low terraces that are parallel to major streams in the northern part of the county. Slopes are generally long and smooth. Most areas of this map unit are used for woodland or pasture and wetness is a moderate limitation. The BeA series is a very deep, poorly drained soil on low terraces and floodplains adjacent to major streams. This map unit is poorly suited to most urban uses, as it is subject to flooding for brief periods several times each year. The flooding, wetness, and slow permeability are severe limitations and low strength is a severe limitation affecting local roads and streets (NRCS 2003).

Maps prepared by the Federal Emergency Management Agency (FEMA 1986) illustrating floodplain areas at TUA I were used to identify baseline conditions within the study area. The FEMA maps were available only as paper copies and could not be digitized electronically due to the lack of detail and landmarks on the maps. Maps depicting the footprint for the Preferred Alternative were overlaid on the floodplain area maps using best professional judgment to identify direct impacts to floodplains. Based on this FEMA map, 100-year floodplains appeared to be located on portions of the TUA I (Figure 3). Therefore, this SOF describes the conservative estimate that some projects included in the preferred actions adjacent to the floodplain were considered to be potentially within the 100-year floodplain. As stated in *Procedural Manual 77-2* (USDOI 2003b), “if the cost of obtaining precise floodplain information is prohibitive, the NPS will assume the project is within a regulatory floodplain unless the site can be determined beyond reasonable doubt to be outside the floodplain.” Therefore, some projects included in the preferred action are assumed to be located in the floodplain, although this may be a conservative estimate due to the lack of detail included in the FEMA 1986 map and due to the cost of obtaining precise floodplain information for the site. Additionally, the *Director’s Order #77-2: Floodplain Management* does not apply to historic or archeological structures, sites, or artifacts whose location is integral to their significance or to certain actions as specifically identified in *Procedural Manual #77-2: Floodplain Management*. Because the activities proposed as part of the preferred action indirectly support the historical significance of TUA I, the location within the floodplain may not be considered integral. Again, this floodplain SOF was prepared as a conservative measure. Indirect impacts were assessed by reviewing activities outside floodplains and assessing the potential for impacts to the floodplain areas. Floodplain Zones as mapped by FEMA are located within the site boundary and include zones A12, B, and C. The majority of the work proposed to preserve, restore, and rehabilitate the HCA as part of the preferred alternative would occur outside of the 100-year floodplain (zone C). However, some vegetation clearing activities of the HCA, the rehabilitation of the historic pond and plane tie-down area, and the construction of a storm water detention pond are proposed to occur in zones B and A12 of the 100-year floodplain (Figure 4).

Figure 3: Approximate Floodplains Location

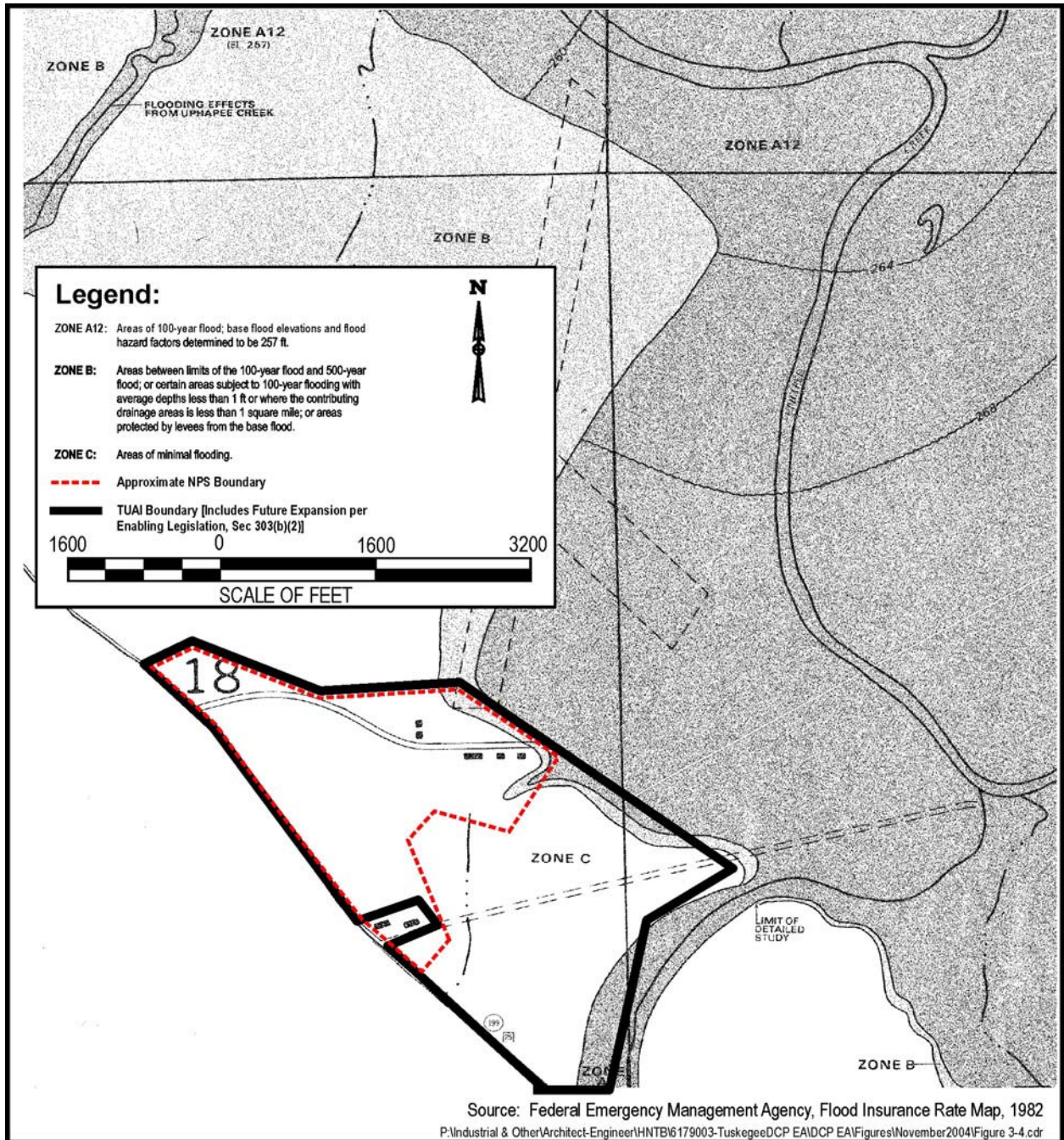
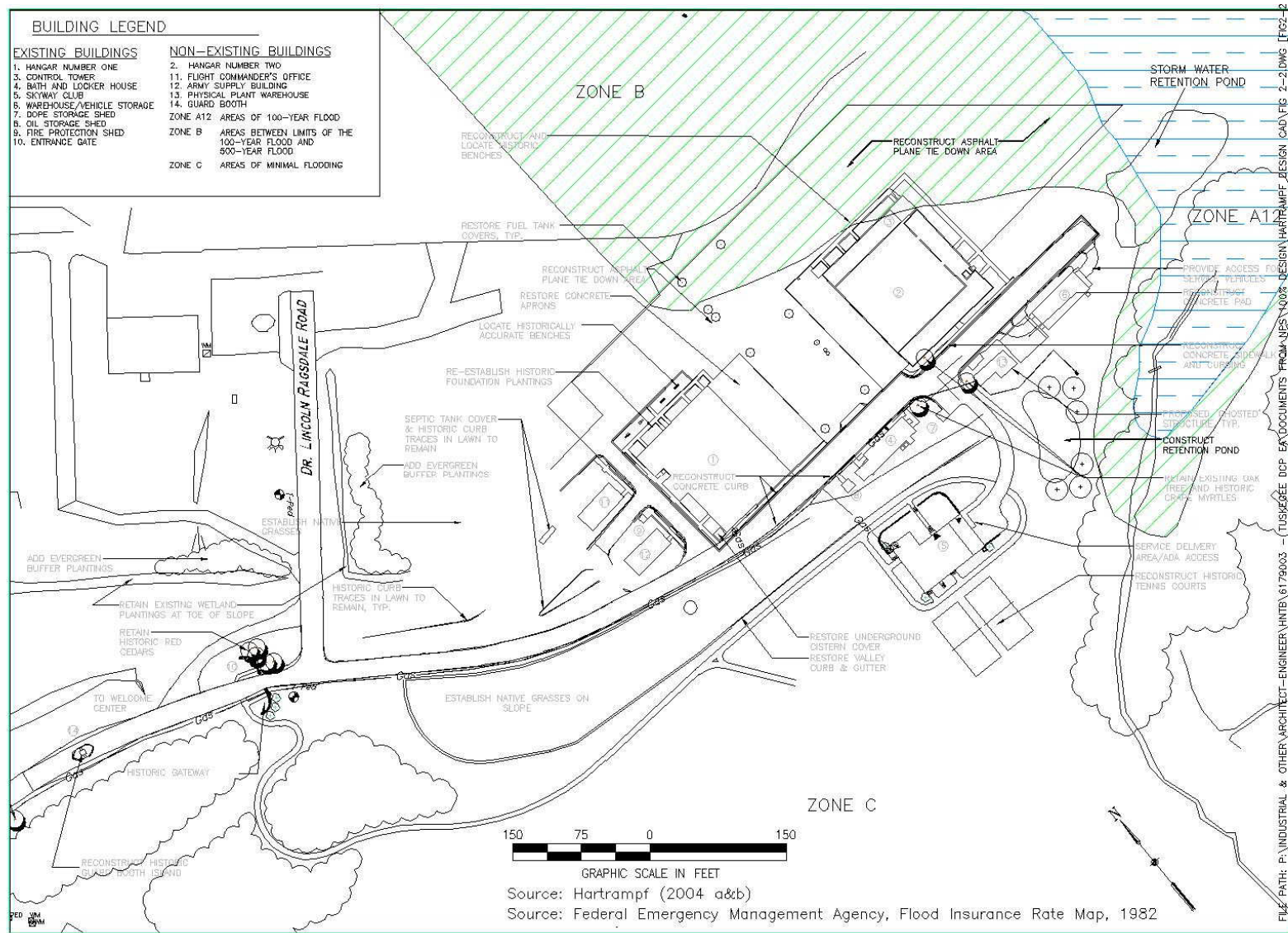


Figure 4: Approximate Location of Floodplains within TUA I



2. JUSTIFICATION FOR USE OF THE FLOODPLAIN

2.1 Why Proposed Action is Located Within the Floodplain

Several activities included in the proposed action will occur or partially occur within the floodplain including vegetation clearing, rehabilitation of the historic pond and plane tie-down area, and construction of a storm water detention pond. These are the historic areas of the site therefore rehabilitation must take place on site. Rehabilitating the plane tie-down area is necessary to return the landscape to the period of significance of the Tuskegee Airmen. The plane tie-down area is currently failing impervious surface and this asphalt will be replaced as part of the DCP/EA. Construction of a storm water pond in the floodplain would also alter the floodplain; however, it would provide water management functions consistent with the function of floodplains. The storm water detention pond would temporarily detain stormwater, preventing it from flooding adjacent areas in the floodplain already prone to flooding during storm events. The vegetation removal and rehabilitation of the historic pond are necessary to rehabilitate the historic landscape. New vegetation appropriate to the historic period of significance would be planted and the area would be maintained as vegetated. No flood storage volume would be lost as a result of these projects. Alternatives to vegetation removal were not considered since the vegetation removal within the 100-year floodplain is necessary to rehabilitate the historic landscape.

2.2 Investigation of Alternative Sites

The proposed action and the No Action alternative are described in detail in the project DCP/EA. No further development or alterations to the site would occur with the No Action Alternative. The site would remain in its current use; therefore, there would be no impact to floodplains at the site. However, the No Action alternative does not meet the NPS needs or mission for this project.

Alternative construction sites for the storm water detention pond were investigated and dismissed from further analysis due to potential impacts to stream habitat and wetlands. Initially, the storm water detention pond location was considered within the unnamed tributary to the Uphapee River. To avoid impacts to the water resources and potential wetlands along the tributary, the storm water detention pond was planned for the present location. The historic pond in the HCA was also considered as a location for the storm water detention pond, but this location did not fulfill the NPS mission of returning the HCA to reflect the 1945 appearance of the TUAL.

Alternatives to vegetation removal were not considered since the vegetation removal within the 100-year floodplain is necessary to rehabilitate the historic landscape. However, new vegetation appropriate to the historic period of significance would be planted, and the area would be maintained as vegetated. Best Management Practices (BMPs) would be required during construction to minimize impacts of pond construction and vegetation removal within the floodplain.

3. DESCRIPTION OF SITE-SPECIFIC FLOOD RISKS

The floodplains on the TUA I site are located in the far northeast corner of the NPS property and appear to partially encompass the HCA. These floodplains are associated with a small, unnamed tributary to the Uphapee Creek. A site visit was conducted on 30 September 2004 at TUA I in the vicinity of the unnamed tributary to discuss the location of the storm water detention pond. The tributary was approximately 3 to 5 feet wide and 2 to 4 inches deep, appeared to convey stormwater off the site, and was flowing at the time of the site visit.

The development of the storm water detention pond proposed within the floodplains for the TUA I site was not designed as an attraction to tourists visiting the park. The storm water detention pond will temporarily detain stormwater, preventing it from flooding adjacent areas in the floodplain already prone to flooding during storm events. This pond was not designed as a congregation point and visitors would not be expected to visit this area. Therefore, the risk of this development within the floodplain to visitors is assumed to be minimal.

The vegetation clearing and rehabilitation was also not designed as a tourist attraction, but as a rehabilitation of the cultural landscape of the TUA I to its period of significance. The clearing activities would not occur during extremely wet periods of the year and therefore does not pose risks to the contractors or park personnel completing the vegetation clearing and rehabilitation. Therefore, the risk of this development within the floodplain to visitors is assumed to be minimal.

The rehabilitation of the historic pond and plane tie-down will include excavation and replacing asphalt that is currently failing. The plane tie-down area consists of existing impervious surfaces that will be replaced with new impervious surface and the historic pond has filled in with sediments, is currently vegetated, and will be rehabilitated as a dry pond. These areas are not designed as a main attraction to tourists visiting the park nor where they designed as a congregation point, so visitors would not be expected to linger in these areas. Therefore, the risk of this development within the floodplain to visitors is assumed to be minimal.

Since there will be no loss of flood storage volume, these projects do not represent a risk to people or property elsewhere in the drainage area.

4. EXPLANATION OF FLOODPLAIN MINIMIZATION PLANS

As much as possible, secondary construction impacts to floodplain areas and communities would be avoided during the new construction activities, including the grading of the storm water detention pond, the clearing of the vegetation within the HCA, the improvement of impervious surfaces at the plane tie-down area, and excavation of the historic pond. In order to minimize and mitigate the environmental impacts, an erosion and sediment control plan will be prepared and included in the final construction plans, and disturbance of vegetation will be minimized. Mitigation would also include

replanting the area disturbed by construction activities with native species. Specifically, the area proposed for vegetation clearing activities will be rehabilitated with vegetation from the cultural landscape of the TUAJ during its period of significance.

5. CONCLUSION

The NPS finds that there are no practicable alternatives to rehabilitating the cultural landscape of the TUAJ to its period of significance (1941 to 1945) that do not involve proposed activities that are located within the 100-year floodplain. The development of the storm water detention pond proposed within the floodplains for the TUAJ site was not designed as an attraction or congregation point for tourists visiting the park. The vegetation clearing was also not designed as a tourist attraction, but to rehabilitate the cultural landscape to return TUAJ back to its period of significance. The rehabilitation of the historic pond and plane tie-down will include excavation and replacing existing impervious surfaces and are not designed as an attraction to tourists visiting the park. The risk of this development within the floodplain is found to be minimal and no other practical alternatives existed since the HCA is partially located within the 100-year floodplain. The NPS, therefore finds that this project is in compliance with the Executive Order 11988, *Floodplain Management*.

6. REFERENCES

- Federal Emergency Management Agency (FEMA). 1982. Flood Insurance Rate Map.
- Hartrampf. 2004a. *Value Analysis Study for Preservation and Rehabilitation of Moton Field Buildings and Grounds and Construction of Visitor Facilities, Tuskegee Airmen National Historic Site*. January 15.
- Hartrampf. 2004b. *100 Percent Design Analysis. Tuskegee Airmen National Historic Site Preservation and Rehabilitation of Moton Field Buildings and Construction of Visitor Facilities*. August.
- Pond & Company. 2002a. *Cultural Landscape Report for Moton Field, Tuskegee, AL*. Prepared for National Park Service. September 30.
- U.S. Department of the Interior, National Park Service (NPS). 2003a. *Director's Order #77-2: Floodplain Management*. Effective Date: September 8, 2003, Sunset Date: September 8, 2007.
- U.S. Department of the Interior, National Park Service (NPS). 2003b. *Procedural Manual #77-2: Floodplain Management*.

LIST OF ACRONYMS

ABTT	Alabama Bureau of Tourism and Travel
ADA	Americans With Disabilities Act
ADEM	Alabama Department of Environmental Management
AEM	Alabama Environmental Management
AIP	Airport Improvement Plan
AMEA	Alabama Municipal Electric Authority
APE	Area of Potential Effect
AQCR	Air Quality Control Region
bgs	Below Ground Surface
BMP	Best Management Practices
CAA	Clean Air Act
CBMPP	Construction Best Management Practices Plan
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CIP	Capital Improvement Plan
CLR	Cultural Landscape Report
CO	Carbon Monoxide
CPP	Continuing Planning Process
CRIA	Coosa River Improvement Association
CWA	Clean Water Act
DCNR	Department of Conservation and Natural Resources
DCP	Development Concept Plan
DERP	Defense Environmental Restoration Program
DOD	Department of Defense
DOI	Department of the Interior
DOT	Department of Transportation
DRO	Diesel Range Organics
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
F&W	Fish and Wildlife
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FPPA	Farmland Protection Policy Act
FR	Federal Register
FY	Fiscal Year
GPS	Global Positioning System

GMP	General Management Plan
GRO	Gasoline Range Organics
HCA	Historic Core Area
HSR	Historic Structures Report
IDT	Interdisciplinary Team
IPM	Integrated Pest Management
LEEDS	Leadership in Environmental and Engineering Design System
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NHS	National Historic Site
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRI	Nationwide Rivers Inventory
O ₃	Ozone
ONRW	Outstanding National Resource Water
Pb	Lead
PM ₁₀	Particulate Matter Less Than 10 µm ³
QCP	Qualified Credentialed Professional
RTE	Rare, Threatened, and Endangered
SABA	South Alabama Birding Association
SO ₂	Sulfur Dioxide
SR	State Route
SRHPC	Southern Research Historic Preservation Consultants, Inc.
SRS	Special Resource Study
STIP	Statewide Transportation Improvement Program
SVOC	Semivolatile Organic Compound
SWCC	Soil and Water Conservation Committee
TAI	Tuskegee Airmen, Inc.
TANC	Tuskegee Airmen National Center
TUAI	Tuskegee Airmen National Historic Site
U.S.C.	United States Code
USACE	U.S. Army Corps of Engineers

USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank
VAS	Value Analysis Study
VOC	Volatile Organic Compound
VSA	Visitor Services Area
WSR	Wild and Scenic Rivers

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